



# DEPARTMENT OF DEFENSE (AFHSB) Seasonal Influenza Surveillance Summary

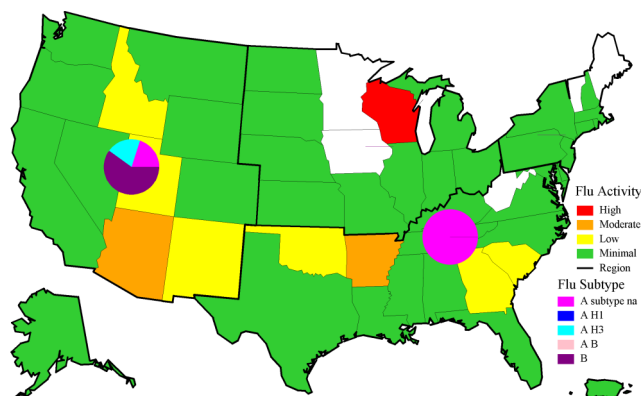


Northern Command -- Week 46 (15 Nov—21 Nov 2015)

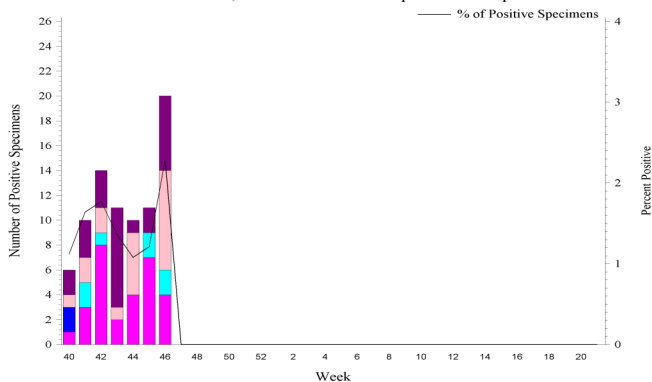
NORTHCOM Service Members, Influenza Activity and Virus Subtype, During the Last 2 Weeks

In NORTHCOM during week 46<sup>1,2</sup>

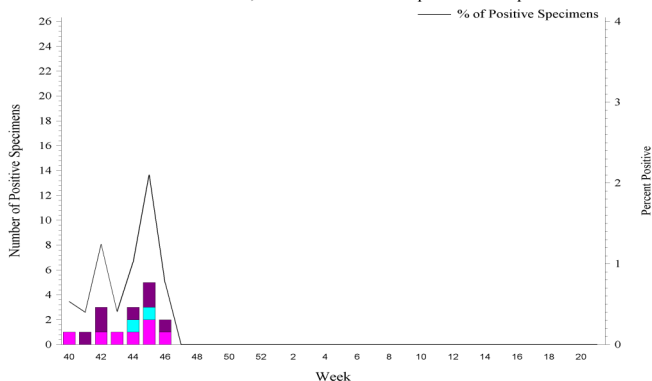
- ◆ Influenza activity overall was minimal, but some states have low to moderate activity. The high level in Wisconsin may be a data anomaly.
- ◆ The percentage of outpatient visits due to ILI decreased below baseline and previous seasons.
- ◆ Flu A (H3N2 predominating) and B viruses continue to both circulate.
- ◆ Cumulative percentages of positive lab tests remained low at 0.93% for service members and 1.5% for other beneficiaries.



NORTHCOM Beneficiaries, Influenza Positive Specimens Reported to AFHSB



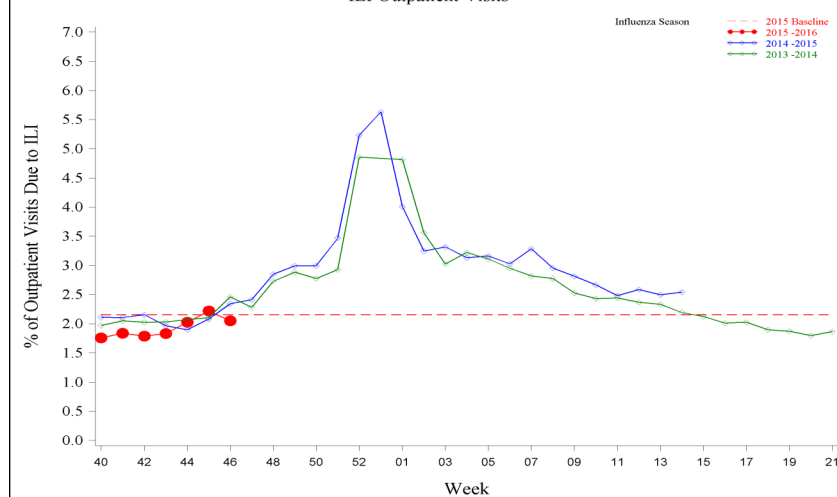
NORTHCOM Service Members, Influenza Positive Specimens Reported to AFHSB



2015 – 2016 NORTHCOM Season Totals<sup>1,2</sup>

	A/H1N1	A/H3N2	A/Untyped	Flu B	AB	% Positive
Service Members	0	2	7	7	0	0.93
Dependents	2	7	29	25	19	1.5

NORTHCOM Service Members, 2015-2016 and Previous 2 Influenza Seasons ILI Outpatient Visits



- ◆ NHRC laboratory-confirmed influenza cases, US Military Basic Trainees: Data only through Week 45

	Week 45 <sup>3</sup>				2015 – 2016 Recruit Season Totals <sup>3</sup>				
	A/H1N1	A/H3N2	A/unsubtyped	Flu B	A/H1N1	A/H3N2	A/unsubtyped	Flu B	No. Tested
Ft Benning									25
Ft Jackson									16
Ft Leonard Wood									20
NRTC Great Lakes									10
Lackland AFB									0
MCRD Parris Island									17
MCRD San Diego									44
CGTC Cape May									0
Total	0	0	0	0	0	0	0	0	132

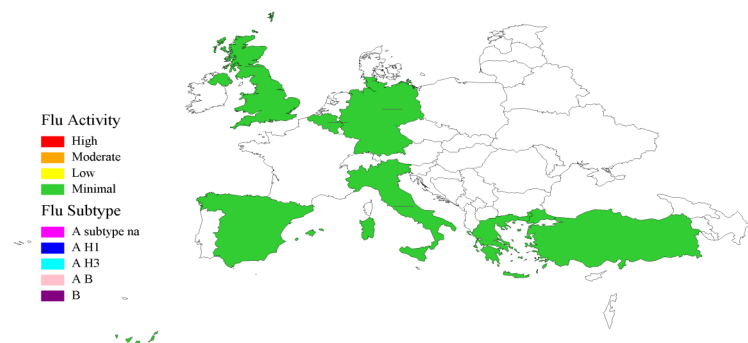
<sup>1</sup>AFHSB, <sup>2</sup>USAFSAM, <sup>3</sup>NHRC, <sup>4</sup>LRMC, <sup>5</sup>PHCR-E, <sup>6</sup>AFRIMS, <sup>7</sup>NMRC-A, <sup>8</sup>USAMRU-K, <sup>9</sup>NAMRU-3, <sup>10</sup>NAMRU-6

**European Command -- Week 46**

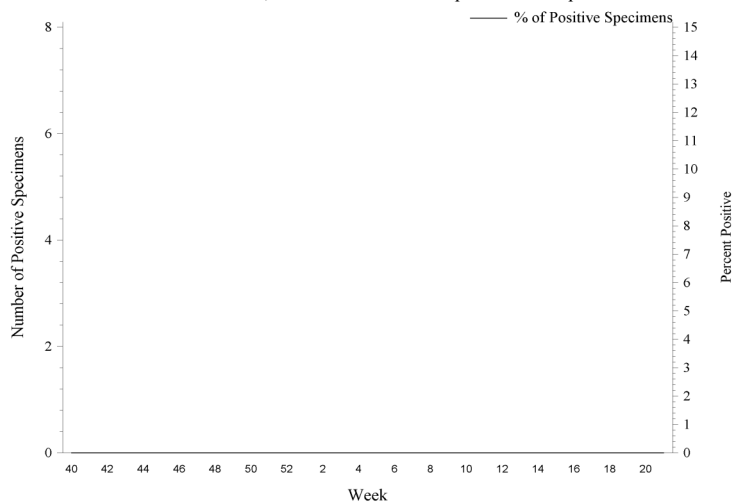
In EUCom during week 46<sup>4,5</sup>

- ◆ Influenza activity remained minimal across EUCom.
- ◆ The percentage of outpatient visits due to ILI remained below baseline and previous seasons.
- ◆ No influenza positive lab tests were reported for week 46.
- ◆ The cumulative percentages of positive lab tests remained low for Week 46: 0.00% for service members and 1.17% for other beneficiaries.

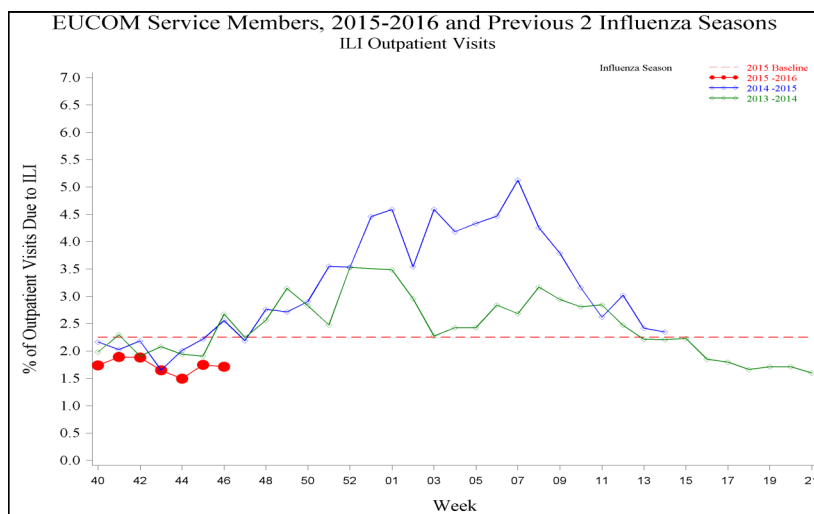
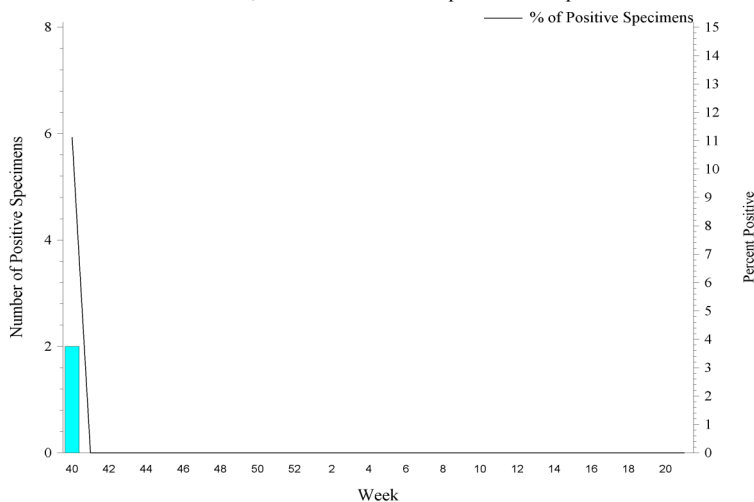
EUCom Service Members, Influenza Activity and Virus Subtype, During the Last 2 Weeks



EUCom Service Members, Influenza Positive Specimens Reported to AFHS



EUCom Beneficiaries, Influenza Positive Specimens Reported to AFHS



2015-2016 EUCom Season Totals <sup>1,4,5</sup>						
	A/H1N1	A/H3N2	A/Untyped	Influenza B	AB	% Positive
Service Members	0	0	0	0	0	0
Dependents	0	2	0	0	0	1.17

<sup>1</sup>AFHSB, <sup>2</sup>USAFSAM, <sup>3</sup>NHRC, <sup>4</sup>LRMC, <sup>5</sup>PHCR-E, <sup>6</sup>AFRIMS, <sup>7</sup>NMRC-A, <sup>8</sup>USAMRU-K, <sup>9</sup>NAMRU-3, <sup>10</sup>NAMRU-6

**Pacific Command -- Week 46**In PACOM during week 46<sup>1,6,7</sup>

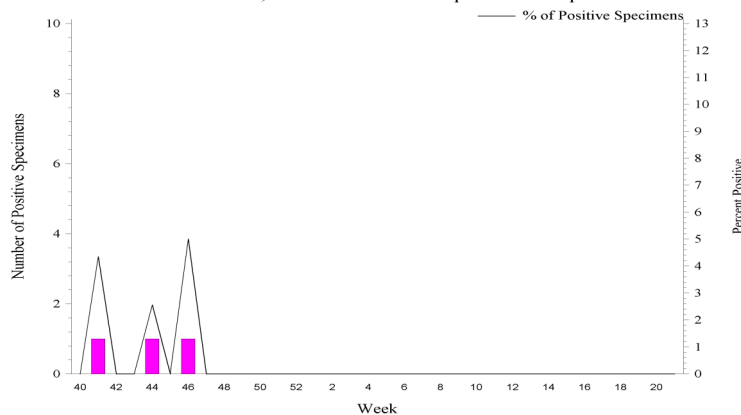
- ◆ Influenza activity was minimal throughout PACOM.
- ◆ The percentage of outpatient visits due to ILI was below baseline and decreased below previous seasons.
- ◆ Two influenza A cases were reported for Guam and one influenza A case and one influenza B case were reported in Hawaii over the past two weeks.
- ◆ The cumulative percent of positive lab tests for service members and other beneficiaries were 1.72% and 6.11%, respectively.

PACOM Service Members, Influenza Activity and Virus Subtype, During the Last 2 Weeks  
South Korea and Japan**PACOM: Guam and Hawaii Influenza Activity and HL7 Test Positive (MAP: SM+BN, 2 wks)**

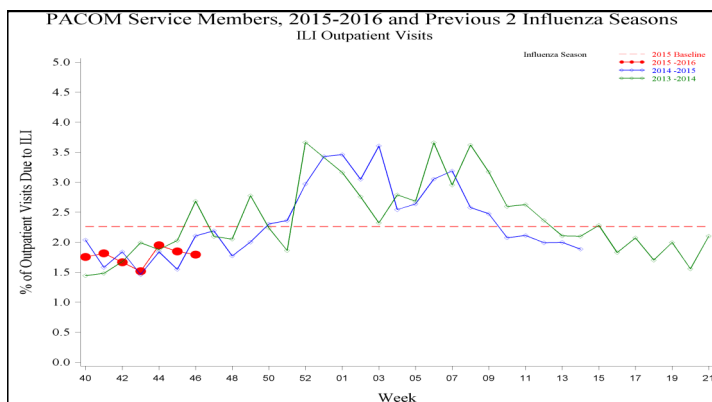
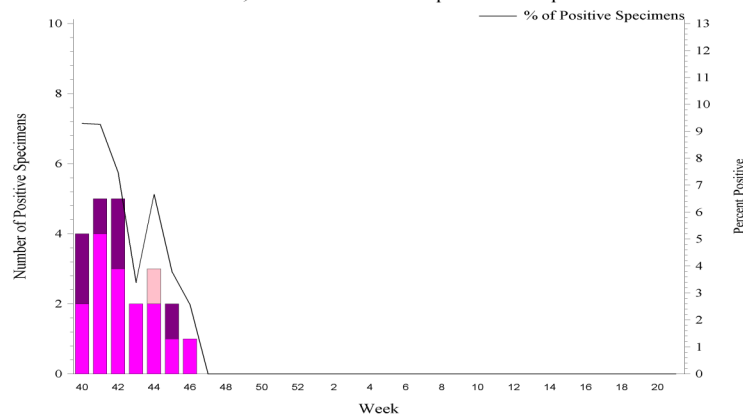
Area Name	Influenza Activity	HL7 Type				
		A(H1)	A(H3)	A Untyped	B	AB
<b>Guam</b>	1:Minimal	0	0	2	0	0
<b>Hawaii*</b>	1:Minimal	0	0	1	1	0

\*Hawaii HL7 Type counts may include samples received from Guam, but tested in Hawaii

PACOM Service Members, Influenza Positive Specimens Reported to AFHSB



PACOM Beneficiaries, Influenza Positive Specimens Reported to AFHSB

**2015-2016 PACOM Season Totals<sup>1,6,7</sup>**

	A/H1N1	A/H3N2	A/Untyped	Flu B	Flu AB	% Positive
Service Members	0	0	3	0	0	1.72
Dependents	0	0	15	6	1	6.11

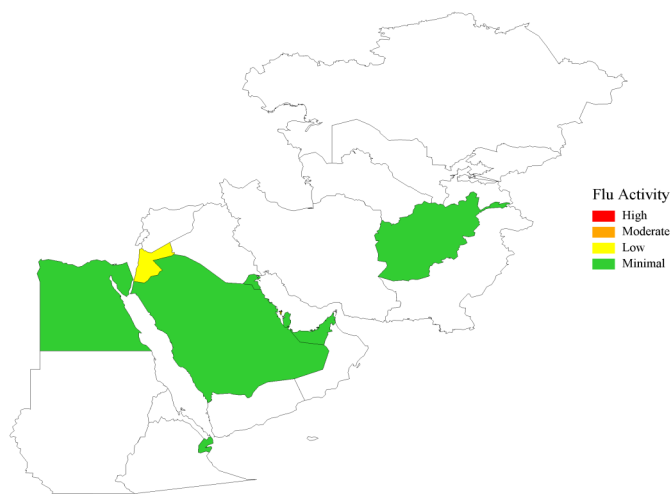
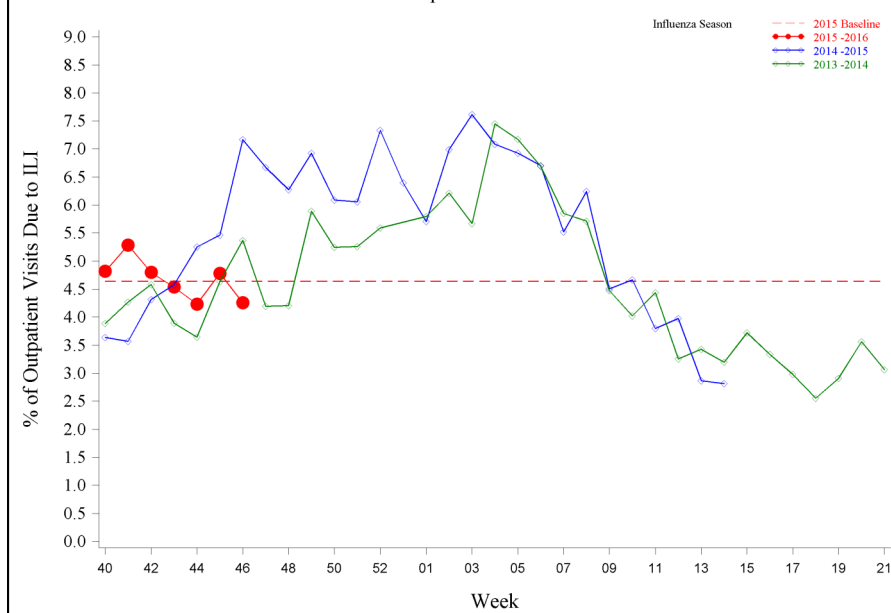
<sup>1</sup>AFHSB, <sup>2</sup>USAFSAM, <sup>3</sup>NHRC, <sup>4</sup>LRMC, <sup>5</sup>PHCR-E, <sup>6</sup>AFRIMS, <sup>7</sup>NMRC-A, <sup>8</sup>USAMRU-K, <sup>9</sup>NAMRU-3, <sup>10</sup>NAMRU-6

**Central and Africa Commands -- Week 46**

In CENTCOM and AFRICOM during week 46<sup>1,8,9</sup>

- ♦ Influenza activity remained minimal in CENTCOM and AFRICOM.
- ♦ The percentage of outpatient visits due to ILI decreased and was below baseline and previous seasons.

CENTCOM, Influenza Activity, During the Last 2 Weeks

CENTCOM Service Members, 2015-2016 and Previous 2 Influenza Seasons  
ILI Outpatient Visits**Southern Command -- Week 46**

In SOUTHCOM during week 46<sup>10</sup>

- ♦ Influenza activity in Honduras was minimal based on DMSS data.

<sup>1</sup>AFHSB, <sup>2</sup>USAFSAM, <sup>3</sup>NHRC, <sup>4</sup>LRMC, <sup>5</sup>PHCR-E, <sup>6</sup>AFRIMS, <sup>7</sup>NMRC-A, <sup>8</sup>USAMRU-K, <sup>9</sup>NAMRU-3, <sup>10</sup>NAMRU-6

## Description:

Maps, figures and tables are stratified by Combatant Commands (CCMD). The map provides a measure of influenza activity by state or country within each CCMD for the past two weeks for service members. Influenza activity is defined by the percentage of outpatient visits associated with an Influenza-like Illness (ILI) for each week compared to baseline levels of influenza activity. Additionally, a pie graph by US region or country is generated to display the distribution of influenza types and subtype identified from positive laboratory tests for the past two weeks combined.

## Influenza activity: Percentage of Outpatient Visits Associated with ILI:

The percentage of all outpatient visits for ILI is calculated each week for all service members, regardless of component. This data is presented as a map of the past two weeks' activity and a figure to display the entire season's data compared to the two prior seasons and baseline. For the map, the activity level compares the mean reported percent of visits due to ILI for the past two weeks to the mean reported percent of visits due to ILI during baseline weeks. Baseline weeks are defined as non-influenza weeks (weeks 22-39) over the past 3 years.

There are four activity levels reported on each map. The activity level corresponds to the number of standard deviations (SD) below, at or above the mean for the current week compared to the mean of the baseline weeks. Activity levels are classified as minimal, low, moderate, and high. Minimal activity corresponds to an influenza percentage that is less than 2 SD above the mean. Low activity corresponds to an influenza percentage that is equal to or greater than 2 SD above the mean, but less than 4 SD above the mean. Moderate activity corresponds to an influenza percentage that is equal to or greater than 4 SD above the mean, but less than 6 SD above the mean. High activity corresponds to an influenza percentage that is equal to or greater than 6 SD above the mean.

## Influenza Positive Specimens:

Lab results from PCR, viral culture, and rapid influenza assays are reported. Although the inclusion of rapid tests may underestimate the weekly and cumulative percent positive estimates due to false negatives, visibility of the positive rapid results provides valuable information for this surveillance report. Influenza types/subtypes are categorized as influenza A not subtyped (A subtype na), influenza A/H1 (A H1), influenza A/H3 (A H3), influenza A and B co-infection (A B), and influenza B (B).

Map: Each US region or country with available data contains a pie chart that displays the distribution of influenza types and subtypes for that area for the past two weeks combined. Two weeks of data are combined instead of using just the current week's data due to delays in reporting of laboratory results.

Figure and Table: Each week, using the total number of influenza laboratory tests performed and the positive test results, the proportions positive for each serotype of influenza are calculated for service members and dependents separately.

## Data Sources and Case Definitions:

Medical encounter and demographic data from the Armed Forces Health Surveillance Branch's (AFHSB) Defense Medical Surveillance System (DMSS) are used to generate this report. In addition, health-level 7 (HL-7) laboratory data is provided by the Navy and Marine Corps Public Health Center (NMCPHC) EpiData Center Division. For the past seasons and baseline calculations, ICD-9 codes from outpatient encounters are used to identify influenza activity. The outcome of influenza activity based on ICD-9 codes is defined using the combined codes for ILI (79.99, 382.9, 460, 461.9, 465.8, 465.9, 466.0, 486, 487.0, 487.1, 487.8, 488, 490, 780.6, or 786.2). For the current season, ICD-10 codes from outpatient encounters are used to identify influenza activity. The outcome of influenza activity based on ICD-10 codes is defined using the combined codes for ILI (B97.89, H66.9, H66.90, H66.91, H66.92, H66.93, J00, J01.9, J01.90, J06.9, J09, J09.X, J09.X1, J09.X2, J09.X3, J09.X9, J10, J10.0, J10.00, J10.01, J10.08, J10.1, J10.2, J10.8, J10.81, J10.82, J10.83, J10.89, J11, J11.0, J11.00, J11.08, J11.1, J11.2, J11.8, J11.81, J11.82, J11.83, J11.89, J12.89, J12.9, J18, J18.1, J18.8, J18.9, J20.9, J40, R05, R50.9). An individual can only be counted as a case once per week.

## NORTHCOM Regions:

The regions on the NORTHCOM map (bold, black outlines) are defined using the four US Census regions, with the exception of Hawaii and Guam which are a part of PACOM. *Northeast:* Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont, New Jersey, New York, Pennsylvania, Puerto Rico, and the U.S. Virgin Islands. *South:* Delaware, the District of Columbia, Maryland, Virginia, West Virginia, Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Arkansas, Louisiana, Texas., and Oklahoma. *Midwest:* Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin, Iowa, Kansas, Missouri, Nebraska, North Dakota, and South Dakota. *West:* New Mexico, Colorado, Montana, Utah, Wyoming, Arizona, California, Nevada, Alaska, Idaho, Oregon, and Washington.

<sup>1</sup>AFHSB, <sup>2</sup>USAFSAM, <sup>3</sup>NHRC, <sup>4</sup>LRMC, <sup>5</sup>PHCR-E, <sup>6</sup>AFRIMS, <sup>7</sup>NMRC-A, <sup>8</sup>USAMRU-K, <sup>9</sup>NAMRU-3, <sup>10</sup>NAMRU-6

For inquiries or comments please contact [dha.ncr.health-surv.list.afhs-ib-alert-response@mail.mil](mailto:dha.ncr.health-surv.list.afhs-ib-alert-response@mail.mil)